

THE PLEASURES AND PERILS OF THE TEAPOT.

BY A FAMILY DOCTOR.



WITHIN a comparatively short period tea has become the national drink. Introduced into England about two hundred years ago, it soon became a popular beverage, and the taste for it has been growing steadily ever since. In 1841 twenty-two ounces of tea, on an average, were used by each person in England; in 1874 this quantity was trebled. Many and diverse are the evils which have been attributed to tea-drinking; and, if they can be proved, it is obvious that

such an enormously increased consumption cannot fail to exercise profound influence on the general health. Naturally the most marked effect will be observable among those who drink most tea, *i.e.*, among women. Chief among the ill-effects ascribed to it are indigestion and nervousness, and these have been traced to two causes—(A) the kind and quality of the tea used, and (B) the method of infusion. A few words in reference to the first factor. Black tea is now most generally used. The difference between green and black tea does not depend upon their preparation from different species of plants, but upon the treatment to which the leaves are subjected. The latter is the result of a process of fermentation before the leaves are dried and heated. Green tea is prepared from young leaves which are dried at once after being gathered. It commands a higher price, and for that reason it was at one time extensively adulterated, in fact, it was often manufactured by an enterprising dealer from common black tea with the help of a little indigo or Prussian-blue, judiciously toned down with French chalk or turmeric to get the right tint. The best kinds are prepared from the younger and smaller leaves, while the older leaves form the coarser varieties. Indian have latterly supplanted, to a large extent, the historic China teas. In 1877 about thirty-one million pounds of Indian were imported. During the following ten years the consumption was more than trebled, amounting to ninety-seven million pounds in 1887; the amount imported from China being proportionately diminished. Probably this rapid increase in popularity depends upon the peculiar flavour of Indian teas and upon their cheapness—possibly patriotic motives may also help to some extent. There has been much discussion as to the relative merits of the two teas. There is no doubt but that the Indian is much more prone to induce digestive disturbances than the Chinese. This

fact has been explained by the greater proportion of tannin found in the Indian. After prolonged infusion (for fifteen minutes) it was found that samples of the finest Indian yielded nearly two and a half times as much tannin as the best China. If the infusion were less prolonged (for three minutes) the Indian teas still yielded a large excess of tannin; and, as a general rule, it may be said that prolonged infusion of the best China does not increase very materially the amount of tannin extracted.

Examining tea chemically, it is found to contain an alkaloid, theine, identical with caffeine, the alkaloid of coffee, and very closely related to theobromin, the alkaloid found in cocoa. Alkaloids are complex chemical bodies with highly active properties, and many of the most valued medical drugs (*e.g.*, morphine, strychnine) belong to the same class. It is a curious fact that all the world over men of every race take small quantities of some alkaloid as a part of their daily food, and that this alkaloid is either theine or some substance almost identical with it. I need only mention the use of cocoa and of maté or Paraguay tea (which is largely used in South America as a beverage) to illustrate this statement.

Tea also contains about fifteen per cent. of tannin combined with the theine and some salts, together with an aromatic volatile oil. The physiological action of tea, *i.e.*, the sensation of well-being which we experience after imbibing it, is due to the theine—in excess this induces nervousness. The interference with the natural processes of digestion which results in an attack of dyspepsia is due to the tannin; and the peculiar flavour of the tea depends upon the volatile oil.

Passing now to the methods of infusion, the problem is to make an infusion which shall contain as much of the theine and the aromatic oil and as little of the tannin as possible. First of all, a good quality of tea must be selected—this condition is obviously essential. Then the water must be boiling, but it must not have boiled long; for if so, the taste becomes insipid. It should be neither too hard nor too soft—soft water is, however, more economical, as it extracts more of the soluble principles of the leaves, and makes a darker infusion. Length of infusion is a most important point. The longer the infusion the less the flavour, for the aroma is lost. Too much of the soluble matter is also extracted by prolonged infusion, and therefore the tea will contain an excess of tannin. As a general rule, it may be said that infusion for three or four minutes is amply sufficient. About one ounce of dry leaf to a quart of water is the usual allowance; half that quantity for weak, and half as much again for strong tea.

Very frequently dyspepsia results from the constant doses of tannin which many people take, not once, but several times a day. Tannin has the property

of rendering hard and insoluble all kinds of animal food, and therefore tea taken with meat is injurious, as the meat is made difficult of digestion. It has been found that a small pinch of bicarbonate of soda put in each cup materially diminishes the effect of the tannin. The addition of milk has a similar action, though not to such a marked degree; and it is probably for this reason that it is so universally used. There are many preparations recommended to render tea harmless; but it is wiser to drink it weak and sparingly than to trust to any antidotes. The best time to take it is with a light meal in the afternoon, because the nervous system is tired and fatigued after the day's work, and the gentle stimulus afforded by the theine refreshes and reinvigorates the whole body without any of the ill-effects which follow the use of most stimulants. Even tea may, however, be used so as to produce injury, and all its good effects lost. Those who drink it morning, noon, and night, become slaves to the habit, quite as much as those who habitually take too much alcohol, for its effects on the nervous system may result in depression, loss of will-power, palpitation of the heart, and very marked muscular tremors. Inveterate dyspepsia and general nervousness may be produced. There is a widespread and pernicious habit—unfortunately becoming much more prevalent

among women—of drinking a cup of tea the first thing in the morning. It is used as a stimulant—at the very time when the whole system ought to be refreshed by the night's rest and ready for work. This practice is often begun thoughtlessly and unnecessarily. The state of mind and body which demands it must be improved by suitable medical treatment. Men sometimes excuse their habit of taking alcoholic "nips" in the morning to counteract their depression by pointing to the equally injudicious practice of women taking tea for the same purpose.

The lesson to be drawn is, that however beneficial may be the use of any article of food, the benefit depends upon its being used wisely and in moderation. Excess even in the most innocent of enjoyments inevitably results in injury. There is no doubt that tea increases the power of enduring fatigue, and was used extensively for that reason during the last Egyptian campaign. It is frequently successful in relieving headache, and is very useful as an antidote to alcoholic intoxication. If we are out of sorts and a little feverish, it tends to promote the activity of the skin; and it is well known that tea accelerates the action of aperients. It is, therefore, important that the use of tea should not degenerate into abuse.



MODERN CROCHET WORK.

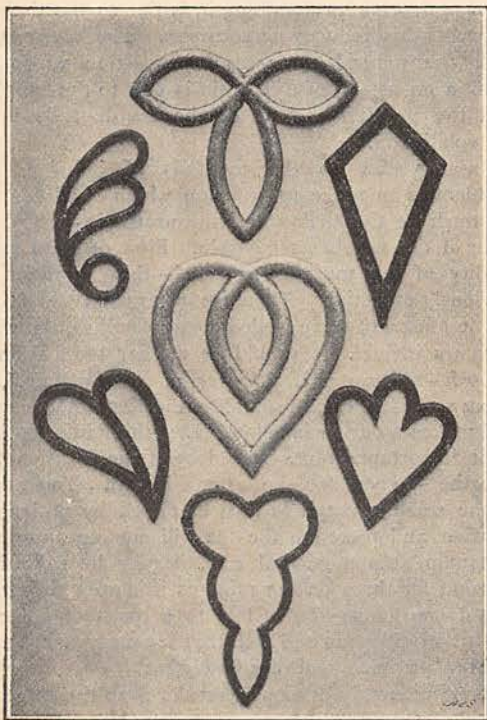


FIG. 1.—MOULDS FOR MODERN CROCHET.

SOME few months ago the rulers of Fashion decreed that crochet was to be largely worked once more, and accordingly many women who had been acquainted with this art during its previous reign of popularity sought out their disused hooks and balls of thread and patterns and began diligently to make yards of trimmings, stripes and squares.

It so happens, however, that few fashions reappear in their original form, and this was notably the case with the crochet, and, though there is little to be said against many of the old patterns, they are totally different from those which find admirers nowadays. In the first place, the fine cotton that was considered a beauty thirty years or so ago has given place to a glossy, tightly-twisted twine, not very unlike that used for making Macramé lace. Gold thread, too, enriches the general effect; dainty tassels and drops hang about the work, and—greatest of all innovations—pasteboard moulds serve to give substance to the stitches, and prove of great assistance in forming the patterns.

These moulds are sometimes black, at other times drab, according to whether the twine with which they are covered is light or dark in tone. There is an enormous variety to be had in the shapes and sizes, and the moulds are procured in more than sixty different forms, a few of the most elaborate being given in Fig. 1. They are the introduction of M^{rs}. Carl Mez